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EXAMINER

BOTTS, MICHAEL K

ART UNIT

PAPER NUMBER

2176

DATE MAILED: 07/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/713,734

Applicant(s)

BHOGAL ET AL.

Examiner

Michael K. Botts

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 April 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10, 12-15, 19 and 23-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10, 12-15, 19, and 23-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This document is a Final Office Action on the merits. This action is responsive to the following communications: Amendment, which was filed on April 14, 2006.
2. Claims 1-10, 12-15, 19, and 23-31 are currently pending in the case, with claims 1, 15, 19, and 23 being the independent claims.
3. Claims 11, 16-18, and 20-22 were cancelled.
4. Claims 1-3, 10-13, 15, 17, 19, 23, 24, and 28-30 have been amended.
5. Claims 23-31 are objected to.
6. Claims 1-10, 12-15, 19, and 23-31 are rejected.

### ***Claims Objections***

7. **Claims 23-31** are objected to because of the following informalities:

Regarding claim 23, line 9, the index letter "d)" is repeated from the previous line, thereby causing the remaining index letters to be incorrect. Based on the context of the claim, the Examiner believes that the indexing of the sequence "d), d), e), f), and g)" was intended to be "d), e), f), g), and h)," respectively, and the index letters will be so read for the remainder of the Office Action.

Regarding claims 24, 28, 29, and 30, the index letter "(g)" is believed to have been intended to refer to corrected index "(h)," based on correction of the mislabeling of claim 23, and the claim will be so read for the remainder of this Office Action.

Regarding claims 25, 26, 27, and 31, claims 25, 26, 27, and 31 inherit the error in indexing in claim 23, based on their dependency on claim 23 or on a claim dependent

on claim 23, and claims 25, 26, 27, and 31 will be read as incorporating the correction to claim 23, as stated above, for the remainder of this Office Action.

Appropriate correction is required.

### ***Claims Rejection – 35 U.S.C. 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. **Claims 1-10, 12-15, 19, and 23-31** are rejected under 35 U.S.C. 103(a) as being unpatentable over by Kougiouris, et al. (U.S. Patent Application Publication 2004/0039993 A1, claiming priority as a continuation of U.S. Patent Application 09/441,188, which was filed on November 15, 1999, and also claiming priority to Provisional Application 60/158,938, which was filed on October 12, 1999, and to Provisional Application 60/165,093, which was filed on November 12, 1999) [hereinafter "Kougiouris"].

9. Initially, it is noted that a "rule" is specially defined in the disclosure as follows:

*In general, an electronic form includes fields for entering data, the heading for each field of the form and any instructional information. In order to ensure the validity of the data entered into the field of the form, some or all of the fields will have an associated validation rule. A validation rule is simply a logical sequence of operators and operands for performing one or more tests or comparisons on data in one or more fields to make sure the data is valid. In the implementation of*

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*a particular electronic form, a set of validation rules ensures correct entry of data into the form. The validation rules test the contents of each field entered by the user to ensure that the field is filled out correctly, either after the user enters data into the field, or after the form is transmitted back to a centralized server computer.*

See, disclosure, page 2, lines 11-20. Through examination of the specification and the claims, the Examiner believes the Applicants intended the term "rule" to be synonymous with the term "validation rule," and the claims will be so read for the remainder of this Office Action.

Regarding **dependent claim 1, as amended**, Kougiouris teaches:

*A computer implemented method for selecting rules from a rules repository to validate information submitted on an electronic form comprising the steps of:*

- a) creating a validation rules repository on a computer;*
  - b) in response to receiving a connection request, establishing a connection with the created rules repository;*
  - c) receiving a rule request;*
  - d) receiving a validation rule description;*
  - e) determining whether there are any rules that match the validation rule description;*
  - f) sending a query to the user to create a new rule when no rule matches the validation rule description and storing the created rule in the rules repository;*
- and*

*g) retrieving the selected rule from the rules repository for incorporation into the electronic form.*

(Kougiouris teaches a “validation rules repository” as a “validating/formatting manager component.” See, Kougiouris, paragraph [0013]. Un use, the “validating/formatting manager component” is taught as being connected by methods within the program. The rule request is taught as a response to a user action, such a s KEYUP event. The “validating/formatting manager component” then matches the code associated with the form component and determines whether the input is valid. See, Kougiouris, paragraphs [0018]-[0020].

Kougiouris does not expressly teach “sending a query to the user to create a new rule when no rule matches the validation rule description and storing the created rule in the rules depository,” but it does teach that if the input is invalid, the manager component may re-set the form GUI element to use the new formatted input. See, Kougiouris, paragraphs [0020]. Kougiouris teaches to automatically update the rule, whereas the claim specifies to query the user first.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have interposed a user query prior to updating the rule repository based on an invalid input.

The suggestion or motivation for the modification of the teaching of Kougiouris is the obvious and beneficial purpose of determining whether the “invalid” entry was an actual update or a mere mistake. In addition, Kougiouris teaches the updating as one embodiment, and permits that “numerous variations and modifications will become

apparent to those skilled in the art once the above disclosure is fully appreciated.” See, Kougiouris, paragraph [0146].)

Regarding **dependent claim 2, as amended**, Kougiouris teaches:

*The method as described in claim 1 further comprising before said retrieving step (g), the step of displaying at least one rule from the rules repository in response to a rule request.*

(See, Kougiouris, paragraph [0119], teaching that the validating/formatting component may interface with a validating/formatting interface as a COM interface, Java component, or Java interface. The interface would display the rules as specified in the claim.)

Regarding **dependent claim 3**, Kougiouris teaches:

*The method as described in claim 2 wherein said step (a) further comprises establishing a plurality of categories of rules and storing the rules in the plurality of categories according to rule type.*

(See, Kougiouris, paragraph [0089], teaching that a “component implementation,” or “rule,” may provide support for more than one pattern or code, thereby teaching a plurality of categories according to a rule type.)

Regarding **dependent claim 4**, Kougiouris teaches:

*The method as described in claim 3 wherein rule categories comprise alphabet and number categories.*

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(See, Kougiouris, paragraph [00089], teaching a category for a number category, being either U.S. or European phone numbers under the phone code category. See also, Kougiouris, paragraph [0144], teaching the inclusion of a variety of Coordination of Benefits (COB) codes from various insurance code protocols under the COB category.)

Regarding **dependent claim 5**, Kougiouris teaches:

*The method as described in claim 3 wherein rule types comprise name, zip code, telephone number, city, state and address, and credit card number.*

(See, Kougiouris, paragraphs [0107], [0106], [0105], [0104], and [0108], teaching rule types for names, zip codes, telephone numbers, state, and addresses, respectively.)

Regarding **dependent claim 6**, Kougiouris teaches:

*The method as described in claim 3 wherein said displaying step further comprises displaying a category of validation rules.*

(See, Kougiouris, paragraph [0119], teaching that the validating/formatting component may interface with a validating/formatting interface as a COM interface, Java component, or Java interface. Kougiouris does not expressly teach “displaying a category of validation rules,” but it would have been obvious to one of ordinary skill in the art at the time of the invention that the display of the validating/formatting component would include the display of a category of validation rules for the obvious benefit of displaying the category with the sub-category to graphically display the relationship between the identified rules.



The motivation or suggestion for also displaying the category of validation rules is drawn from the fact that Kougiouris teaches that the categories type may have subtypes, such as a variety of phone number types, and it would have been obvious to display the subtypes, such as U.S. phone rules and European phone rules, in association with a display of the category rule, such as "phone numbers."

Therefore, it would have been obvious to one of ordinary skill in the art to have modified the teachings of Kougiouris to include displaying a category of validation rules to result in the invention specified in claim 6.)

Regarding **dependent claim 7**, Kougiouris teaches:

*The method as described in claim 6 further comprising before said displaying step, the step of receiving the rule request containing an identification of a specific validation rules category.*

(Kougiouris does not expressly teach that the display of a category is done after a request is made for the category, but such would have been obvious to one of ordinary skill in the art at the time of the invention for the obvious and beneficial purpose as a logical sequence of events to request the display before displaying it.)

Regarding **dependent claim 8**, Kougiouris teaches:

*The method as described in claim 7 wherein said displaying step further comprises displaying only rules from the identified validation rules category.*

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(Kougiouris does not expressly teach displaying only the category identified, after the category was requested, but such would have been obvious and beneficial purpose of displaying only the particular category of interest, for ease of selection or identification, particularly if there were a large number of categories available for display.)

Regarding **dependent claim 9**, Kougiouris teaches:

*The method as described in claim 8 wherein said rule retrieval step further comprises receiving an identification of a rule in the specific validation rules category and retrieving the identified rule from the rules repository.*

(Kougiouris does not expressly teach receiving an identification of a rule and retrieving the identified rule in order to display the rule, but such would have been obvious to one of ordinary skill in the art at the time of the invention as an obvious and logical step toward displaying a rule,)

Regarding **dependent claim 10, as amended**, Kougiouris teaches:

*The method as described in claim 1 wherein said step (g) further comprises the steps of:*  
*receiving a description of a desired rule;*  
*displaying all rules matching the rule description; and*  
*retrieving a rule selected from the displayed rules matching the rule description.*

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(See, Kougiouris, paragraph [0092], teaching matching a desired rule description in that the manager component, using a set of “factory components,” may pass a value of an attribute in the file as an argument to identify an appropriate validation/formatting component.

Kougiouris does not expressly teach displaying the rules selected from the matching and selection process, but such would have been obvious to one of ordinary skill in the art at the time of the invention for the obvious and beneficial purpose of a way of communicating to the user the results of the matching and selection process, and in order to permit selection by the user from among the matching rules.)

Regarding **dependent claim 12, as amended**, Kougiouris teaches:

*The method as described in claim 11 further comprising the step of storing the newly created rule in the rule repository.*

(See, Kougiouris, paragraph [0020], teaching that the new rule is stored.)

Regarding **dependent claim 13, as amended**, Kougiouris teaches:

*The method as described in claim 1 further comprising after said step (g), the step of incorporating the retrieved rule into the electronic form.*

(See, Kougiouris, paragraph [0020], teaching that the GUI element is re-set to the new rule, thereby incorporating the rule into the electronic form.)

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Regarding **dependent claim 14**, Kougiouris teaches:

*The method as described in claim 13 wherein said incorporating step further comprises:*

*identifying a field in the electronic form;*

*attaching the selected rule to the identified form field; and*

*retrieving validation software for the attached rule.*

(See, Kougiouris, paragraph [0020], teaching that the GUI element is re-set to the new rule, thereby incorporating the rule into the electronic form. The validation software is inherently associated with the rule by the fact that the rule now resides in the validation/formatting component.)

Regarding **dependent claim 15, as amended**, Kougiouris teaches:

*A computer implemented method for creating a repository for rules to validate information submitted on an electronic form comprising the steps of:*

*(a) creating electronic form validation rules;*

*(b) creating a record for each identified validation rule, the record containing a plurality of fields with information about the rule and a link to software that performs the validation of that rule on information in an electronic form that incorporates that rule;*

*(c) creating a set of sub-directories in the rule repository, each sub directory would contain at least two categories of validation rules and a plurality of validation rule types under each rule category;*

- (d) storing the record for an identified validation rule and the corresponding software for that validation rule in the rule repository; and*
- (e) repeating the above steps for each newly created rule.*

(See, Kougiouris, paragraphs [0039]-[0146], teaching creating electronic form validation rules. See also, Kougiouris, paragraphs [0077]-[0084], teaching that the rule may contain a record with a plurality of fields, such as a formatting code wherein a response is generated when the code is validated, such as highlighting, color change, or a message. See also, Kougiouris, paragraph [0010]-[0020], teaching that the rules and software for validation are stored in the rule repository, which is taught as being the “validation/formatting manager component.”

Kougiouris also teaches a plurality of rules under a common category. See, Kougiouris, paragraph [0089], teaching different phone number configurations under the category of “telephone codes.” Kougiouris also teaches a default and override function to identify validation rules. See, Kougiouris, paragraph [0066]. Kougiouris does not expressly teach “creating a set of sub-directories in the rule repository, each sub directory would contain at least two categories of validation rules and a plurality of validation rule types under each rule category.” In that Kougiouris teaches a hierarchy of validation rule types under categories, and a system of alternative default/override categories, it would have been obvious to one of ordinary skill in the art at the time of the invention to have incorporated an additional layer of hierarchy into the validation/formatting control module as specified in the claim or the obvious and beneficial purpose of further ordering the hierarchy. The hierarchy is taught by

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Kougiouris, and additional layers are merely multiples of what is taught and do not create a patentably distinct limitation over the prior art.)

Regarding **dependent claim 19, as amended**, Kougiouris teaches:

*A system for selecting rules to validate information submitted on an electronic form comprising:*

*(a) a repository for storing electronic form validation rules, each validation rule stored in the repository comprises a record containing a description of the requirement that rule enforces and a pointer to the location in the repository of software that executes the validation of that rule on an electronic form, said repository further having a set of validation rule sub-directories in which the rules are stored, said directories being based on categories of validation rules;*

*(b) a computing device connected to said validation rules repository, said computing device capable of interfacing with said repository for the purpose of retrieving form validation rules for incorporation into electronic forms; and*

*(c) a computer network interface connected to said computing device and said validation rules repository for facilitating communication between said repository and said computing device.*

(See, Kougiouris, paragraph [0074]-[0076], teaching the repository as the "validation/formatting manager component" with a repository of rules. The rules are taught as categories. See, Kougiouris, paragraph [0089], teaching that the rules may be in the form of subdirectories of rules. See also, Kougiouris, paragraph [0092],

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teaching that the rules may be accessed by pointers. See also, Kougiouris, figures 5A-6, and paragraphs [0093]-[0121], teaching the computing device connected to the rules repository and capable of interfacing with the repository for the purpose of retrieving form validation rules for incorporation into electronic forms. See also, Kougiouris, figure 9, and paragraphs [0136]-[0143], teaching the invention using a network interface.)

**Claims 23-31** incorporate substantially similar subject matter as claimed in claims 1, 2, 3, 6, 7, 10, 10, 13, and 14, respectively, and are rejected along the same rationale.

10. It is noted that any citations to specific, pages, columns, lines, or figures in the prior art references and any interpretation of the references should not be considered to be limiting in any way. A reference is relevant for all it contains and may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art.

See, MPEP 2123.

### ***Response to Arguments***

Applicants' arguments filed April 14, 2006 have been fully considered, but they are not persuasive.

Regarding rejections of **claims 1-10, 12-15, 19, and 23-31**:

Applicants argue that Turau does not teach or suggest "sending a query to the user to create a new rule when no rule matches the validation rule description and

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storing the created rule in the rules repository.” See, Amendment, page 9.

The Examiner disagrees.

Initially, it is noted that because of the amendments to the claim, the prior art reference of Turau has been replaced by Kougiouris, and arguments relating to the teachings of Turau are moot.

In the interest of compact prosecution, it is noted that Kougiouris teaches a method of storing a new rule when a validation fails. Kougiouris does not expressly teach “sending a query to the user to create a new rule when no rule matches the validation rule description and storing the created rule in the rules depository,” but it does teach that if the input is invalid, the manager component may re-set the form GUI element to use the new formatted input. See, Kougiouris, paragraphs [0020]. Kougiouris teaches to automatically update the rule, whereas the claim specifies to query the user first.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have interposed a user query prior to updating the rule repository based on an invalid input.

The suggestion or motivation for the modification of the teaching of Kougiouris is the obvious and beneficial purpose of determining whether the “invalid” entry was an actual update or a mere mistake. In addition, Kougiouris teaches the updating as one embodiment, and permits that “numerous variations and modifications will become apparent to those skilled in the art once the above disclosure is fully appreciated.” See, Kougiouris, paragraph [0146].



***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** for the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael K. Botts whose telephone number is 571-272-5533. The examiner can normally be reached on Monday through Friday 8:00-4:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Herndon can be reached on 571-272-4136. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MKB/mkb

  
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